

In the two first Columns are expressed the obliquities of the incident and emergent rays to the plate of the Air, that is, their angles of incidence and refraction. In the third Column the Diameter of any coloured Ring at those obliquities is expressed in parts, of which ten constitute that Diameter when the rays are perpendicular. And in the fourth Column the thickness of the Air at the circumference of that Ring is expressed in parts of which also ten constitute that thickness when the rays are perpendicular.

And from these measures I seem to gather this Rule: That the thickness of the Air is proportional to the secant of an angle, whose Sine is a certain mean proportional between the Sines of incidence and refraction. And that mean proportional, so far as by these measures I can determine it, is the first of an hundred and six arithmetical mean proportionals between those Sines counted from the Sine of refraction when the refraction is made out of the Glass into the plate of Air, or from the Sine of incidence when the refraction is made out of the plate of Air into the Glass.

O B S. VIII.

The dark Spot in the middle of the Rings increased also by the obliquation of the Eye, although almost insensibly. But if instead of the Object-Glasses the Prisms were made use of, its increase was more manifest when viewed so obliquely that no Colours appeared about it. It was least when the rays were incident most obliquely on the interjacent Air, and as the obliquity decreased it increased more and more until the coloured Rings appeared,

peared, and then it increased before transparency was in Glasses, but also I have sometimes seen between half the exterior circuit or revolution perpendicularly; wholly vanished other parts of the that the Glasses one another, and of that Spot where fifth or sixth part of the said red.

By looking through Glasses, I found the order of the Colours, as violet, blue, white, yellow, red, &c. and dilute unless obliquely through became pretty violet the blue in the faint as scarcely coloured Rings made